



# JOB SITE TIPS

#### MIXING TIPS

- For two component products, always mix Side-A and Side-B separately to form a homogeneous mixture before combining and mixing the two sides together.
- While mixing, always add Side-A and Side-B slowly and mix thoroughly until a uniform homogeneous mixture is obtained.
- Mix only as much material as can be applied before setting up.
- Use a heavy-duty mixer with a maximum speed of 300 rpm. Always keep mixer blades down at the bottom and draw materials from surface. Do not move mixer blades violently up and down to avoid air entrapment.
- It is required to add a maximum of one quart of water to 1 gallon (3.78 liters) of P-Tuff® or E-Tuff® base membrane for proper curing. Also add P-Tuff® or E-Tuff® Catalyst as needed for faster cure. A maximum of 3 vials of catalyst per 5 gallon pail (18.93 liters) can be added.
- During hot humid days, use cold water to mix in P-Tuff® or E-Tuff® base membranes to extend the pot life and to slow the cure time.
- During cold temperatures, preheat the P-Tuff® or E-Tuff® base membranes and use hot water to accelerate faster curing.
- By adding sand or fine rubber granules from 0.5 to 1.5 by volume into the mixed base membrane material, slurry can be formed which can be used as caulking material for filling cracks, leveling compound for ponding, coving, sloping compound, and patching compound. Only clean, dry silica sand should be used in slurries.

#### SURFACE TEXTURE

By using different surface texturing materials and varying quantity, different types of surface texture from smooth to very aggressive and from highly resilient to very hard textures can be achieved. Normally the owner has the final authority to select a particular surface texture; however, the owner should be informed about the various surface textures. Install a 100-200 sqft (9.30-18.58 sqm) mock of the system before proceeding.

In the majority of cases, 14 to 30 mesh (0.595-1.41 mm) rubber granules or 16 to 30 mesh (0.595-1.19 mm) rounded silica sand are used until refusal for surface textures. Keep in mind that it is harder to clean and maintain aggressive texture. Various surface texture media

available are:

- Rubber granules 14 to 20 mesh (0.84-1.41 mm).
- Dry, rounded silica sand 16 to 30 mesh (0.595-1.19 mm), minimum 6.5+ Mohs hardness.
- 16 Grit Angular Sand for mechanical bonding, used for tile underlayment and shower pans.
- Aluminum oxide for hard traction and industrial environments.
- Color quartz sand for high traffic and decorative walkways.
- Hardened steel grit for mechanical rooms and industrial environments.
- Paint chips.
- Special powders to improve traction in the coating.

The P-Tuff® and E-Tuff® basecoats are a non-gassing material that can be applied at any thickness. It is unique compared to other urethanes because of the water-catalyzed technology as opposed to a moisture-cured urethane. P-Tuff® and E-Tuff® will accelerate curing time only when water is mixed in with the material, allowing greater control of application time and less product waste.

Another benefit of the P-Tuff® and E-Tuff® Membrane System is the time of a job completion depending on the size of the job and the amount of man power. A finished, waterproof system can be applied in a day! A typical urethane system is applied usually in three steps: basecoat (day 1), intermittent/texture coat (day 2), and final topcoat (day 3). Because of the unique characteristics of water-catalyzed technology, the P-Tuff® or E-Tuff® base membrane can be applied about 45 mils to 60 mils (1143-1524 microns) or more depending on the job requirements. Lighter aggregates, such as the granulated rubber, can be applied in less than an hour. The cure time of the membrane can be achieved in four hours or less depending on the membrane to water to catalyst mixing ratio. More catalyst can be used (up to 3 vials per 5 gallon pail [18.93 liters]) to speed up dry time. Also, water temperature can effect cure time as well. Warm or hot water will accelerate cure times, while cold or ice cold water will slow cure times. Never mix more than 25% water to membrane. After the removal of the aggregate refusal, the final topcoat is applied. Cure time for the final coat can also be enhanced by mixing accelerator to the coating material. For optimal results, a second topcoat should be applied over a granulated-rubber surface and medium to heavy traffic areas where a sand broadcast is applied.

## **FLASHING**

- Use Copper, Stainless Steel, aluminum, bonderized or galvanized metal flashing 20 gauge metal or heavier at wall to deck junctions. Poly-tuff Flexi-Flashing may be used in place of metal flashings at wall to deck terminations where metal is not desired. All door threshold flashings and drip edge flashings shall be formed from metal.
- At the open perimeter edge, use 4"x 2"x 4" (101.6 mm x 50.8 mm x 101.6 mm) metal drip edge flashings.
- Nail flashings at a minimum of 2" (50.8mm) between nails. All nails and fasteners shall be compatible with the metal flashing.
- Use only electro-galvanized nails used for roofing. Flashing should be nailed near the edge closest to plywood deck to minimize movement of two different materials from the heat and cold.



- At the edges of the wall and deck, provide smooth transition by proper sloping with sand or rubber slurry mixture.
- All metal flashings must be mechanically abraded using an angle grinder or equivalent, followed by a solvent wipe (xylene). Be sure to provide adequate ventilation whenever working with or using solvents.
- To avoid the use of metal flashings, consider the use of the self-adhesive pressure sensitive Poly-Tuff Flexi-Flashing (see Product Data Sheet for Poly-Tuff Flexi-Flashing).

#### **AVOIDING BLISTERS**

Blisters in P-Tuff® or E-Tuff® Membrane Systems can be avoided by taking the following precautions:

- Always add water into the P-Tuff® or E-Tuff® base membrane. If water is not added to the membrane, then it no longer remains a water-catalyzed membrane and cures as a moisture cure urethane, potentially causing gassing, pin holes and blisters or delaminations.
- Never apply base membrane on a moist substrate. Upon warming up or heating, substrate moisture will turn into vapors and can cause blisters to occur in the cured membrane.
- Take caution to avoid air entrapment while mixing as the entrapped air escaping from the coating may cause blisters and pin holes.
- Prime the surface properly and seal pin holes and bug holes in the substrate. If the substrate is not properly primed, it may lead to pin holes and blistering in the coating. Do not use single component primers over rough texture or pin hole surfaces.
- Allow primer and coating to cure before applying subsequent coats. If the subsequent coat is applied too early before curing, then the solvent in the previous coating will blister.
- Aggregate lumps can blister as the air contained in the lumps will expand and cause blisters and bulges in the coating with rising temperature.
- Surface contaminations may result in a lack of adhesion at the surface. Any air underneath at weak spots will cause blistering with a rise in temperature.